BRUHATH BANGALORE MAHANAGARA PALIKE
Byatarayanapura Division

Name of the work: Improvements to Roads and drains at Amruthanagara, Verma Layout, Bhuvaneshwari Nagara and Surrounding Areas in ward No 07 - Byatarayanapura, Kodigehalli Sub Division.

First RA Bill
TOTAL ABSTRACT

Bruhat Bengaluru Mahanagara Palike

TOTAL ABSTRACT

Name Of work : - Improvements to Roads and drains at Amruthanagara, Verma Layout, Bhuvaneshwari Nagara and Surrounding Areas in ward No 07 - Byatarayanapura, Kodigehalli Sub Division.

Job Code :- 304-17-000041

Name of Agency :- Ram and Company

Bill No :- 1st RA and Part Bill

Measurements recorded on

BOQ Item No	Description	Unit		Qty	Rate	Amount	Remarks
1	**KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						
	Verma layout						
	Present Qty			591.84			
	Previous Bill Qty			0.00			
	Total			**591.84**			
	BOQ qty			7996.35			
	Qty for payment	cum		**591.84**	**196.27**	**116159.46**	
3	**Removing & Refixing Stone slabs of drains and Pointing in C.M(1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)**						
	Verma layout						
	Present Qty			1763.61			
	Previous Bill Qty			0.00			
	Total			**1763.61**			
	BOQ qty			6241.84			
	Qty for payment	Sqm		**1763.61**	**84.59**	**149183.77**	
5 4	**Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						
	Verma layout			161.25			
	Present Qty			161.25			
	Previous Bill Qty			0.00			
	Total			**0.00**			
	BOQ qty			795.17			
	Qty for payment	Sqm		**161.25**	**698.96**	**112707.30**	
7	**KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						
	Verma layout			2.79			
	Present Qty			2.79			

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BOQ Item No	Description	Unit		Qty	Rate	Amount	Remarks
	Previous Bill Qty			0.00			
	Total			**2.79**			
	BOQ qty			464.26			
	Qty for payment	Cum		**2.79**	**5616.20**	**15669.20**	
15	**KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						
	Verma layout			4.46			
	Present Qty			4.46			
	Previous Bill Qty			0.00			
	Total			**4.46**			
	BOQ qty			17.28			
	Qty for payment	cum		**4.46**	**4660.13**	**20802.82**	
16	**KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**					20784	
	Verma layout			7.44			
	Present Qty			7.44			
	Previous Bill Qty			0.00			
	Total			**7.44**			
	BOQ qty			28.80			
	Qty for payment	Sqm		**7.44**	**107.96**	**803.22**	
17	**KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						
	Verma layout			1.12			
	Present Qty			1.12			
	Previous Bill Qty			0.00			
	Total			**1.12**			
	BOQ qty			80.07			
	Qty for payment	**cum**		**1.12**	**6055.83**	**6758.31**	

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BOQ Item No	Description	Unit		Qty	Rate	Amount	Remarks
21	**Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate) with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						
	Verma layout			16.20			
	Present Qty			16.20			
	Previous Bill Qty			0.00			
	Total			**16.20**			
	BOQ qty			46.80			
	Qty for payment	**Sqm**		**16.20**	**5582.85**	**90442.17**	
22	**KSRRB M300- Scarifying Existing Granular Surface to a Depth of 50mm by Manual Means. KSRRB M300-52.1. Scarifying the existing granular road surface to a depth of 50mm and disposal of scarified material and complete as per specifications. MORTH Specification No. 305.4.3 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						
	Verma layout			1952.30			
	Present Qty			1952.30			
	Previous Bill Qty			0.00			
	Total			**1952.30**			
	BOQ qty			2402.00			
	Qty for payment	Sqm		**1952.30**	**48.36**	**94413.23**	
23	**KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						
	Verma layout			129.75			
	Present Qty			129.75			
	Previous Bill Qty			0.00			
	Total			**129.75**			
	BOQ qty			2282.20			
	Qty for payment	**cum**		**129.75**	**156.20**	**20266.95**	
24	**KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechaniqal mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						

BOQ Item No	Description	Unit		Qty	Rate	Amount	Remarks
	Verma layout			729.79			
	Present Qty			729.79			
	Previous Bill Qty						
	Total						
	BOQ qty			2034.18			
	Qty for payment	**cum**		**729.79**	**1856.48**	**1354835.90**	
25	**KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						
	Verma layout			2919.15			
	Present Qty			2919.15			
	Previous Bill Qty			0.00			
	Total			**2919.15**			
	BOQ qty			7354.88			
	Qty to be paid now	**Sqm**		**2919.15**	**31.16**	**90960.71**	
26	**KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						
	Verma layout			1339.67			
	Present Qty			1339.67			
	Previous Bill Qty			0.00			
	Total			**1339.67**			
	BOQ qty			45011.12			
	Qty to be paid now	Sqm		**1339.67**	**3.34**	**4474.50**	
27	**KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						
	Verma layout			6739.94			
	Present Qty			6739.94			
	Previous Bill Qty			0.00			
	Total			**6739.94**			
	BOQ qty			59894.00			
	Qty to be paid now	**Sqm**		**6739.94**	**13.36**	**90045.60**	

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BOQ Item No	Description	Unit		Qty	Rate	Amount	Remarks
28	**KSRRB M500-16. Providing and laying dense bituminous macadam 50-75mm compacted thickness with 4.5% VG-30 Bitumen using 40/60 TPH capacity H.M.P, using crushed aggregates of grading II, premixed with VG 30 grade bituminous binder and transporting the hot mix to work site, laying with mechanical paver to the required grade level and alignment rolling with smooth wheeled, vibratory and tandem rollers to achieve *the desired compaction as per MORTH table 500-10,* complete in all respects complete as per specification MORTH specification No. 507 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						
	Verma layout			115.47			
	Present Qty			115.47			
	Previous Bill Qty			0.00			
	Total			**115.47**			
	BOQ qty			**375.70**			
	Qty to be paid now	**Cum**		**115.47**	**7388.09**	**853073.20**	
29	**KSRRB M500-19. Providing and laying bituminous concrete 40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 6% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						
	Verma layout			170.46			
	Present Qty			170.46			
	Previous Bill Qty			0.00			
	Total			**170.46**			
	BOQ qty			2094.64			
	Qty to be paid now	**Cum**		**170.46**	**8414.28**	**1434338.56**	
37	**KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work**						
	Verma layout			176.70			
	Present Qty			176.70			
	Previous Bill Qty			**0.00**			
	Total			**176.70**			
	BOQ qty			1751.75			

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BOQ Item No	Description	Unit		Qty	Rate	Amount	Remarks
	Qty to be paid now	**M**		**176.70**	**569.86**	**100694.26**	
	Add cost of Waste Plastic @ 8% of Bitumen Weight						
	Verma layout			1922.84			
	Present Qty			1922.84			
	Previous Bill Qty			0.00			
	Total			**1922.84**			
	BOQ qty			67314.24			
	Qty to be paid now	**M**		**1922.84**	**27.00**	**51916.76**	
	GRAND TOTAL					**4607545.91**	

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N.D
AE(WZ)
05/02/18

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara Pal
Bangalore - 560 092

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